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| **Priority Issue Category** | **Priority Issue Statement** | **Priority Area** | **Example Goals** |
| Surface Water Quality | **Failing septic systems** can contaminate groundwater, surface waters and localized drinking water, leading to imminent threats to public health. | Midway, Thomson, Cloquet River, Simian Creek | * Identify and address ground and surface water quality problems stemming from inadequate wastewater treatment by supporting the enforcement of SSTS ordinances and inventory and upgrade X% of non-compliant systems in priority areas. ​ |
| **Pollutants** (e.g., nutrients, bacteria, sediment, chloride, mercury, etc.) are a source of degradation leading to the impairment of aquatic life, aquatic consumption, and aquatic recreation uses. | Swan River, Upper Sand River, Midway, Thomson, Cloquet River, Keene, Sucker, Stoney Brook, Simian Creek | * Complete farm projects on X % of properties identified as needing enhancements (e.g., livestock exclusion, manure storage, pasture management) where there are bacteria impairments. * X% of municipalities with identified bacteria impairments are implementing plans to reduce bacteria in surface waters. * Manage chlorides reaching surface and ground water from road salts and water softener salts by ensuring X% of municipalities have Smart Salt Certified Staff, X% Communities achieved Level 2 Certified & education & outreach to X% of priority landowners. |
| Drinking water Protection | **Drinking water** quality and quantity from surface water and groundwater sources is threatened by land use activities and water appropriations. | Swan River, Upper Sand River, Midway, Thomson | * Protect groundwater quality by sealing X unused, unsealed wells watershed wide. |
| Land Use | Urbanization, development, and road expansion can impact watershed health and increase nutrient and other pollutant loadings when **stormwater** is not effectively managed. | Swan River, Upper Sand River, Midway, Thomson, Keene | * X % of communities have updated their ordinances to promote and implement low impact development techniques to reduce stormwater runoff volume and rate control. |
| Water- and land-based **recreational activities** can impact the quality of lakes and streams, stress wildlife, degrade habitats, and lead to conflict between different uses. | Cloquet Headwaters | * Educate and increase stewardship of recreational land users on their impact to natural resources in X % of high-use & high priority recreational areas. * Mitigate the water quality impacts of recreational use at X% of impacted water resources at high use and high priority areas. |
| **Aggregate mining** (gravel mining) can alter natural hydrology, impacting baseflows for nearby streams and local and regional aquifers. | Lower Cloquet River | * Evaluate impacts of aggregate mining at X % of high priority sites that have the potential to impact sensitive surface and ground water resources. |
| Altered Hydrology | **Channel instability, excess sedimentation, and disruption of natural sediment transport and flow** are present throughout the Planning Area.  **Obsolete and nonfunctioning dams** alter natural hydrology, impede fish passage and aquatic organism movement, and affect stream temperature. | Swan River, Upper Sand River, Midway, Thomson, Cloquet River, Cloquet Headwaters, Keene, Sucker, Stoney Brook | * Reconnect X miles of priority streams and tributaries to benefit aquatic life and improve water quality. * Restore stream reaches that have been altered by human activity, including impounded, straightened, and incised stream reaches on X Linear Feet of high priority streams and tributaries. |
| Loss of water storage, altered flows, and changes in watershed boundaries are the result of land development, drainage, and legacy mining that **alter natural hydrologic processes**. | Swan River, Upper Sand River, Keene, Sucker, Stoney Brook | * Increase X acre/feet of watershed storage by restoring wetlands in identified priority areas where they have been lost and/or altered due to ditching or development activities. |
| Habitat | **Forest fragmentation and loss** can affect ecological community processes, community resilience and adaptive capacity, habitat connectivity and quality, species migration capacity, and surface water and groundwater quality. | Midway, Thomson, Cloquet River, Cloquet Headwaters, Sucker, Stoney Brook | * Protect & manage X acres of private owned forests in areas that protect surface water, drinking/groundwater water quality and riparian habitat. |
| **Aquatic, riparian, and shoreland habitats** are impacted by land use changes, pollution, climate change and altered flows which can lead to degraded resources, incisement and floodplain disconnection, impeded fish passage, and fragmentation. | Midway, Thomson, Cloquet River, Keene, Sucker, Stoney Brook, Simian Creek Swan River, Upper Sand River | * Shoreline ordinances are updated, developed, and enforced for X % of municipalities with priority resource shoreline areas. * X % (or feet) of shoreline in prioritized lakes and streams have natural buffers and near shore areas are protected and restored to reduce erosion using bank stabilization, bioengineering, etc. techniques. * Protect/Restore x% of high priority wild rice stands/populations (water levels, disturbance, shoreland development).​ |
| **Aquatic and terrestrial invasive species** pose a threat to individual habitats and overall biodiversity. | Sucker, Stoney Brook | * Identify and manage X % of high priority sites/resources for invasive species. ​ |